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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,685	01/18/2005	Junichi Oka	10921.0270USWO	2163
52835 7590 07/12/2010 HAMRE, SCHUMANN, MUELLER & LARSON, P.C. P.O. BOX 2902 MINNEAPOLIS, MN 55402-0902				
EXAMINER				
WRIGHT, PATRICIA KATHRYN				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/521,685

**Applicant(s)**

OKA, JUNICHI

**Examiner**

P. Kathryn Wright

**Art Unit**

1797

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 April 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-6,8-12 and 15-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,8-12 and 15-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Status of the Claims***

1. This action is in response to papers filed April 20, 2010 in which claim 1 was amended and claim 14 was canceled. The amendments have been thoroughly reviewed and entered. Any objection/rejection not repeated herein has been withdrawn.

Claims 1, 3-6, 8-12, and 15-17 are under prosecution.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1, 3-6, 8-12, and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vandenberg et al., (US Patent No. 3,709,598), hereinafter "Vandenberg" in view of Bottwein et al., (US Patent No. 6,534,017), hereinafter "Bottwein".

Vandenberg teaches an analyzing device, comprising:

a rotating body 24 for transferring a target analyte 25; and  
an optical detector 88 for optically analyzing the target analyte.

Vandenberg also teaches the rotating body for holding the target analyte by applying a negative pressure to the target analyte while transferring the target analyte in a circumferential direction of the rotating body.

The rotating body of Vandenberg including an inner space (chamber) for negative pressure application, a plurality of positioning recesses (grooves 28), each for placing and holding the target analyte, and through-holes 30 for connecting the positioning recesses and the inner space (see entire document, in particular col. 7, lines 36 et seq.)

Vandenberg teaches the inner space accommodating a blockade member 60 for selectively closing or opening the through-holes by movement relative to the rotating body in clockwise direction.

Vandenberg further teaches removing the target analyte held on the positioning recess via pressurized air from passages 67, 68; however, Vandenberg does not disclose using a blade that is inserted into between the target analyte and a bottom of the positioning recess for removing the target analyte held on the positioning recess. Nor does Vandenberg disclose a guide recess located between each two adjacent positioning recesses for allowing the blade to move relative to the rotating body.

Like Vandenberg, Bottwein teaches a rotating body 40 for transferring a plurality of target analytes 1 and a plurality of positioning recesses (i.e., grooves 41 located 180 degrees from each other, see Figs. 8A-E) sized to receive the target analytes. Bottwein

also uses a blade (reads on rake or hook 100) that is inserted between the target analyte and a bottom of the positioning recess 41 for removing the target analyte held on the positioning recess (see Fig. 10). Bottwein teaches guide portions 42 located between each two adjacent positioning recesses, the guide portions allow the blade to move relative to the rotating body in contact with the bottom of each guide portion and the bottom of each positioning recess, as shown in Figs. 9-10.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention to have substituted the pressurized means of removing the analytes from the recess of the rotating body taught by Vandenberg with the blade and guide recess of Bottwein since this would eliminate the need for additional passages in the rotating body dedicated to pressurized air supply, thereby, simplifying the design of the Vandenberg analyzing device.

As to claim 3, Vandenberg teaches a negative pressure generator (suction device) for applying the negative pressure to the inner space (see col. 7, line 36 et seq.)

Regarding claim 4, Vandenberg teaches the rotating body includes a rotary axis extending insubstantially horizontal direction as see in Fig. 2. Note the vertical and horizontal directions of the device have not been positively recited or related to other elements of the device.

With respect to claims 5 and 6, the rotating body of Vandenberg is formed as a cylinder having an outer surface formed with the positioning recesses (grooves 28) that extend in an axial direction of the rotating body and are spaced from each other in a circumferential direction of the rotating body (see Fig. 3).

As to claim 8, Vandenberg teaches the blockade member extends in an axial direction of the rotating body and is formed with a cutout extending in the axial direction (see Fig. 3).

With respect to claim 9, Vandenberg teaching a housing 25 for accommodating at least a part of the rotating body, wherein one end of the blockade member is non-rotatably supported by the housing (see Fig. 3).

Regarding claim 10, the blockade member of Vandenberg is opened to the through-hole connected to the positioning recess on which the target analyte is placed at the optical detector 88.

As to claims 11 and 12 are directed to the operation of the device. Apparatus claims must be structurally distinguishable from the prior art in terms of structure, not function. The manner of operating an apparatus does not differentiate an apparatus claim from the prior art, if the prior art apparatus teaches all of the structural limitations of the claim (see MPEP § 2114 & § 2173.05(g)). Nevertheless, the target analyte of Vandenberg is transferred by rotating the rotating body clockwise 180 degrees from a load position 19 to a reject position, see Fig. 3. The target analyte is transferred from a position at which the target analyte is placed at the positioning recess to the position for measurement by the optical detector 88. The blockade member closes the through-hole connected to the positioning recess at a position where the target analyte is placed on the positioning recess, thereby preventing the target analyte from being subjected to the negative pressure at rejection position 66.

Regarding claim 15, Vandenberg teaches a suction applying clearance (area between rollers 26) provided between positioning recess (groove 28) and the through-hole 30 connected to the positioning recess. The suction applying clearance applying the negative pressure on the target analyte in an area extending in an axial direction of the rotating body.

With respect to claim 16, wherein the suction applying clearance of Vandenberg is formed by a recess smaller than each positioning recess adjacent to a disposing portion and closer to an axis of the rotating body (see Fig. 3).

Regarding claim 17, note that the recited target analyte is not considered as part of the claimed structure of the analyzing device and is therefore not given patentable weight. Apparatus claims must be structurally distinguishable from the prior art in terms of structure, not function. See MPEP § 2114 & § 2173.05(g).

### ***Response to Arguments***

5. Applicant's arguments filed April 20, 2010 have been fully considered but they are not persuasive.

In response to the previous rejection of claims 1, 3-6, 8-12, and 15-17 under 35 U.S.C. 103(a) as being unpatentable over Vandenberg in view of Bottwein, Applicant argues that during the process of removing of the test element 1, the blade (i.e., rake 100) of Bottwein would prevent rotation of the rotating body (i.e., roller 40). Applicant also argues that rake 100 does not come into contact with the bottom of the groove (i.e., guide portion 41) or slit (recess 42) while the roller rotates.

The examiner respectfully disagrees. The claims are to an apparatus, not a process. Thus, the rotation of the rotating body and/or process of moving of the blade while the rotating body rotates are not attributed patentable weight in the context of a claim addressed to an apparatus. Such method steps are only an intended usage of the apparatus, not a limitation of the apparatus itself. See MPEP 2114. Furthermore, it is clear from Fig. 10 of Bottwein that the blade 100 can be moved laterally within the guide portions 42 so that it contacts the bottom of the guide portion 42. Thus, the guide portions 42 "allow for" the blade 100 to contact the bottom of the guide portion and the bottom of the recess 41 so that the blade is inserted between the target analyte 1 and the bottom of the recess 41 for removing the target analyte in the positioning recess 41, as recited in claim 1, see Fig. 10.

Thus, for the reasons delineated above, the claims remain rejected over the prior art.

### ***Conclusion***

6. No claims are allowed.
7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not



mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to P. Kathryn Wright whose telephone number is (571)272-2374. The examiner can normally be reached on Monday thru Thursday, 9 AM to 6 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/P. Kathryn Wright/  
Primary Examiner, Art Unit 1797